

ABSTRACT OF THE DISCLOSURE

Distance d_1 between the right edges of A1 and B2, and distance d_2 between the right edges of A3 and B4 are calculated. If data to be embedded is 1, one or a combination of a process for increasing the size of B2 in the column direction or decreasing the size of B4 in the column and a process for moving the position of B2 toward B3 or moving the position of B4 toward B3 is executed to meet $d_1 > d_2$. If data to be embedded is 0, one or a combination of a process for decreasing the size of B2 in the column direction or increasing the size of B4 in the column direction, and a process for moving the position of B2 toward B1 or moving the position of B4 toward B5 is executed to meet $d_1 < d_2$.